WHAT IS CLAIMED IS

1. A method for obtaining background suppression information and further image enhancement information, comprising the steps of:

counting the number of pixel luminance values or range of pixel values to produce a luminance histogram array of the input image;

for each pixel luminance value, adding the pixel chrominance value or range of it to a second and third array to produce two dependent chrominance histogram arrays of the input image, one for each of the chrominance channels; and

processing the first, second, and third luminance and dependent chrominance histogram arrays to obtain the background suppression information and extract further enhancement parameters including the black point, white point and contrast parameters, and using the value of these parameters to automatically apply background removal and additional image enhancement to the input image.

2. The method according to Claim 1 further comprising the step of creating a look-up table content modified automatically based on analysis of the histogram arrays of the input image.

3. The method according to Claim 2 where the analysis is based on collecting certain input image statistics, including luminance and dependent chromina histogram of the input image.

4. The method according to Claim 2 where the white point, representing the brightest luminance area in said input image, is determined based on the luminance histogram content and applied to modify the look-up table content to lighten the output image.

5. The method according to Claim 2 where the black point, representing the darkest luminance area in the input image, is determined based on the luminance histogram content and applied to modify the look-up table content to darken the output image.

6. The method according to Claim 2 where the luminance histogram values from the analysis is further used for modifying the look-up table content to enhance the input image, such as increasing the contrast of brightening the shadow detail of the input image.

7. The method according to Claim 2 where the additional dependence chrominance histogram is used for determining the neutrality of individual pixels or local area, or the entire input image, in order to detect whether the input image or any part of it is color or gray scale.

8. The method according to Claim 7 where the neutrality information is further applied to eliminate any residual colors in the output image or any part of it by forcing the output chrominance channel to zero.

9. The method according to Claim 7 where the neutrality information is further applied to preserve the color integrity of the output image or any part of it by forcing the output chroma channels away from zero.

10. A system for obtaining background suppression information and image enhancement information, comprising:

means for counting the number of pixel luminance values or range of pixel values to produce a luminance histogram array of the input image;

for each pixel luminance value, adding the pixel chrominance value or range of it to a second and third array to produce two dependent chrominance histogram arrays of the input image, one for each of the chrominance channels; and

means for processing the first, second, and third luminance and dependent chrominance histogram arrays to obtain the background suppression information and extract further enhancement parameters including the black point, white point and contrast parameters, and using the value of these parameters to automatically apply background removal and additional image enhancement to the input image.

11. The system according to Claim 10 further comprising means for creating a look-up table content modified automatically based on analysis of the histogram arrays of the input image.

12. The system according to Claim 11 where the analysis is based on means for collecting certain input image statistics, including luminance and dependent chromina histogram of the input image.

13. The system according to Claim 11 where the white point, representing the brightest luminance area in said input image, is determined based on the luminance histogram content and applied to modify the look-up table content to lighten the output image.

14. The system according to Claim 11 where the black point, representing the darkest luminance area in the input image, is determined based on the luminance histogram content and applied to modify the look-up table content to darken the output image.

15. The system according to Claim 11 where the luminance histogram values from the analysis is further used for modifying the look-up table content to enhance the

input image, such as increasing the contrast of brightening the shadow detail of the input image.

16. The system according to Claim 15 where the additional dependence chrominance histogram is used for determining the neutrality of individual pixels or local area, or the entire input image, in order to detect whether the input image or any part of it is color or gray scale.

17. The system according to Claim 16 where the neutrality information is further applied to eliminate any residual colors in the output image or any part of it by forcing the output chrominance channel to zero.

18. The system according to Claim 17 where the neutrality information is further applied to preserve the color integrity of the output image or any part of it by forcing the output chroma channels away from zero.

19. A method for obtaining background suppression information and further image enhancement information, comprising the steps of:

counting the number of pixel luminance values or range of pixel values to produce a luminance histogram array of the input image;

for each pixel luminance value, adding the pixel chrominance value or range of it to a second and third array to produce two dependent chrominance histogram arrays of the input image, one for each of the chrominance channels; and

processing the first, second, and third luminance and dependent chrominance histogram arrays to obtain the background suppression information and extract further enhancement parameters including the black point, white point and contrast parameters, and using the value of these parameters to automatically apply background removal and additional image enhancement to the input image for creating a look-up table content modified automatically based on analysis of the histogram arrays of the input image.

20. The method according to Claim 19 where the analysis is based on collecting certain input image statistics, including luminance and dependent chromina histogram of the input image.